



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/049,751	02/15/2002	Kazuyuki Miya	L9289.02120	7586
24257	7590	02/02/2006	EXAMINER	
STEVENS DAVIS MILLER & MOSHER, LLP			NGO, NGUYEN HOANG	
1615 L STREET, NW			ART UNIT	
SUITE 850			PAPER NUMBER	
WASHINGTON, DC 20036			2663	

DATE MAILED: 02/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

22

# Office Action Summary

Application No.

10/049,751

Applicant(s)

MIYA, KAZUYUKI

Examiner

Nguyen Ngo

Art Unit

2663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 15 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Hottinen et al. (US 6,611,507), hereinafter referred to as Hottinen.

**Regarding claim 1**, Hottinen discloses a system and method for controlling information transmission and communication handoff between FDD and TDD communication systems (Abstract). Hottinen further disclose;

that the mobile station of the system monitors for the pilot search signal which is generated by the communication systems, where the pilot search signal corresponds to a transmission range of the communication systems (monitoring means for monitoring a downlink signal (pilot search signal) from each of a plurality of systems in a radio communication system, col3 lines 26-30 and col8 lines 45-46) and that when the mobile station determines that the pilot search signal has exceeded a predetermined power threshold, the mobile station request a handoff between systems (outputting monitoring information, col8 lines 58-62).

that the mobile station handoff request is sent from the mobile station to the "new" base station via the base station currently supporting the mobile station, and the new base station determines whether or not to grant access to the new base station based on desired parameters (communication/connecting means for communicating/connecting with a base station of a system selected by a base station (grant access or not) based on the monitoring information (pilot search signal), col8 line63- col9 line 8). One base station being a FDD base station, and the other base station being a TDD base station (col7 lines 60-63), where the base station determines to grant access to it's system (FDD or TDD).

**Regarding claim 2**, Hottinen discloses the monitoring information is at least one item selected from a group of services in a plurality of systems, communication environment, and moving speed of its own station (col8 lines 37-41, col11 lines 61-65).

**Regarding claim 3**, Hottinen discloses a system and method for controlling information transmission and communication handoff between FDD and TDD communication systems (Abstract). Hottinen further disclose;

that the mobile station of the system monitors for the pilot search signal which is generated by the communication systems, where the pilot search signal corresponds to a transmission range of the communication systems (col3 lines 26-30 and col8 lines 45-46) and that when the mobile station determines that the pilot search signal has exceeded a predetermined power threshold, the mobile station request a handoff

between systems (reception quality measuring means for measuring reception quality of a downlink signal (pilot search signal exceeding a predetermined power threshold) from each of a plurality of systems (pilot search signal generated at each base station) in a radio communication system, col8 lines 58-62).

that the mobile station handoff request is sent from the mobile station to the "new" base station via the base station currently supporting the mobile station, and the new base station determines whether or not to grant access to the new base station based on desired parameters (communication/connecting means for communicating/connecting with a base station of a system selected by a base station (grant access or not) based on the reception quality (power strength), col8 line63- col9 line 8). One base station being a FDD base station, and the other base station being a TDD base station (col7 lines 60-63), where the base station determines to grant access to it's system (FDD or TDD).

**Regarding claim 4,** Hottinen discloses a system and method for controlling information transmission and communication handoff between FDD and TDD communication systems (Abstract).

**Regarding claim 5,** Hottinen discloses;

that the mobile station handoff request is sent from the mobile station to the "new" base station via the base station currently supporting the mobile station, and the new base station determines whether or not to grant access to the new base station

Art Unit: 2663

based on desired parameters (selecting means for selecting a system (whether or not to grant access it's system) to accommodate the communication terminal apparatus based on the monitoring information from the communication terminal apparatus, col8 line63-col9 line 8). One base station being a FDD base station, and the other base station being a TDD base station (col7 lines 60-63), where the base station determines to grant access to it's system (FDD or TDD).

that the TDD system base station acknowledges the handoff request by way of an acknowledgment signal back to the mobile station (notifying means for notifying information of the system selected (acknowledgement) to the communication terminal apparatus (mobile station), col9 lines 11-15).

**Regarding claim 6**, Hottinen discloses a system and method for controlling information transmission and communication handoff between FDD and TDD communication systems (radio communication method, Abstract). Hottinen further disclose;

that the mobile station of the system monitors for the pilot search signal which is generated by the communication systems, where the pilot search signal corresponds to a transmission range of the communication systems (col3 lines 26-30 and col8 lines 45-46) and that when the mobile station determines that the pilot search signal has exceeded a predetermined power threshold, the mobile station request a handoff between systems (a step of a communication terminal apparatus (mobile station) monitoring a downlink signal (pilot search signals) from a plurality of systems in a radio communication system and outputting monitoring information, col8 lines 58-62).

that the mobile station handoff request is sent from the mobile station to the “new” base station via the base station currently supporting the mobile station, and the new base station determines whether or not to grant access to the new base station based on desired parameters (a step of a base station apparatus selecting a system (grant access) to accommodate the communication terminal apparatus based on the monitoring information from the communication terminal apparatus (handover request), col8 line63- col9 line 8). One base station being a FDD base station, and the other base station being a TDD base station (col7 lines 60-63), where the base station determines to grant access to it's system (FDD or TDD).

that when the handoff is complete, the mobile station is completely supported by the new base station (a step of the communication terminal apparatus communicating/connecting with the base station of the system selected by the base station (completion of handover), col9 lines 48-51).

**Regarding claim 7**, Hottinen discloses a system and method for controlling information transmission and communication handoff between FDD and TDD communication systems (radio communication method, Abstract). Hottinen further disclose;

that the mobile station of the system monitors for the pilot search signal which is generated by the communication systems, where the pilot search signal corresponds to a transmission range of the communication systems (col3 lines 26-30 and col8 lines 45-46) and that when the mobile station determines that the pilot search signal has exceeded a predetermined power threshold, the mobile station request a handoff

between systems (a step of measuring reception quality of a downlink signal (pilot search signal exceeding a predetermined power threshold) from each of a plurality of systems (pilot search signal generated at each base station) in a radio communication system, col8 lines 58-62).

that the mobile station handoff request is sent from the mobile station to the "new" base station via the base station currently supporting the mobile station, and the new base station determines whether or not to grant access to the new base station based on desired parameters (a step of communicating/connecting with a base station of a system selected by a base station (grant access or not) based on the reception quality (power strength), col8 line63- col9 line 8). One base station being a FDD base station, and the other base station being a TDD base station (col7 lines 60-63), where the base station determines to grant access to it's system (FDD or TDD).

**Regarding claim 8**, Hottinen discloses a system and method for controlling information transmission and communication handoff between FDD and TDD communication systems (Abstract).

### ***Conclusion***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a) Mousley (US 6556585), Method Of Controlling A Communication System And The System Employing The Method.

b) Scott (US 6094421), Timing Adjustment Control For Efficient TDD, FDD or Hybrid TDD/FDD Communication.

c) Ishiguro et al. (US 2004/0203786), Control Device OF Mobile Communication System.

d) Iyengar et al. (US 6349213), Apparatus For Enhanced Voice Quality In Multiple Cordless Handset Environment And Method.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nguyen Ngo whose telephone number is (571) 272-8398. The examiner can normally be reached on Monday-Friday 7am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571) 272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2663

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

N.N.

\*\*\*

**Nguyen Ngo**

United States Patent & Trademark Office  
Patent Examiner AU 2663  
(571) 272-8398



**RICKY Q. NGO**  
SUPERVISORY PATENT EXAMINER